BIOLOGICAL RESOURCES REPORT
California Institution for Men
City Of Chino
San Bernardino County, California

Prepared For:

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EXECUTIVE SUMMARY

This Biological Resources Report transmits the results of surveys for Federally and State-listed endangered, threatened, and other sensitive plant and wildlife species, which were undertaken in support of the of the California Department of General Services' (DGS) Master Land Use Plan (MLUP) for the California Institution for Men (CIM) located within the City of Chino, County of San Bernardino, California. General and directed surveys for listed and sensitive plant and wildlife species were conducted at the request of Goodell Brackenbush in support of a future Environmental Impact Report to be jointly prepared by the State of California and the City of Chino.

Sapphos Environmental, Inc. (Ms. Marie Campbell, Ms. Melisa Helton, Ms. Susan Shanks, Ms. Michelle Dohrn, Ms. Jennifer Campbell, Mr. Blair Baker, and Mr. Peter Bloom) conducted general and directed surveys in the late spring of 2001. During the surveys, 14 pairs of burrowing owls (Federal and State Species of Special Concern) and a golden eagle (a California Species of Special Concern) were observed within the survey area, along with an active red-tailed hawk nest and an active Cooper's hawk nest. Because the burrowing owls are residents within the project area, Sapphos Environmental, Inc. is currently investigating on-site and off-site mitigation possibilities for birds that may be impacted by the project.

INTRODUCTION

The DGS, through its Asset Planning and Enhancement Branch, has implemented an approach to managing the State's real estate holdings to combine the best private-sector practices with public needs and responsibilities. Pursuant to this management agenda, the CIM site, which contains approximately 2,460 acres of State correctional property, was identified as a real estate asset. The DGS identified approximately 700 acres of surplus land on the northern portion of the CIM site and developed a Strategic MLUP that meets the goals and objectives of the State.

Of the 700 acres, the MLUP identified approximately 245 acres for existing and future recreation facilities, including a proposed golf course. Additionally, as much as 370 acres of this land may be used for residential purposes. Approximately 10 acres will be retained for the existing water treatment plant and future improvements.

PROJECT LOCATION AND SURROUNDING LAND USE

The project is located within the boundaries of the CIM located within the City of Chino, San Bernardino County, California (Figure 1, *Regional Vicinity),* which can be found on the USGS 7.5 minute series Prado Dam topographic quadrangle (Township 2 South, Range 8 West, within the Santa Ana Del Chino Land Grant Boundary) (Figure 2, *Topographic Map).* Surrounding land uses include the primary residential and business district of the City of Chino to the north, Chino Airport to the east, the California Institution for Women and the Prado Basin to the south, and the community of Los Serranos to the west.

STUDY METHODS

California Natural Diversity Data Base Review

Prior to the initiation of field surveys, the most recent version of the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB) was consulted for information pertaining to Federally and State-listed endangered, threatened, and rare species of plants and wildlife and other sensitive plant and wildlife species with reported occurrences within the region surrounding the project site (CDFG 2001). Data were compiled from the USGS 7.5 minute topographic quadrangle in which the project is located and for all adjacent 7.5 minute topographic quadrangles.

The query of the CNDDB resulted in the identification of two listed plant species and four listed wildlife species with known occurrences within the region of the project site. These species were determined, therefore, to have the potential to occur within the project site (Table 1, *Listed and Candidate Species with the Potential to Occur within the Proposed Project Site*). The query of the CNDDB also resulted in the identification of five sensitive plant species and seven sensitive wildlife species with known occurrences within the region of the project site, which were determined, therefore, to have the potential to occur within the project site (Table 2, *Sensitive Species with the Potential to Occur within the Proposed Project Site)*.

Listed species are those provided special legal protection under the Federal Endangered Species Act, the State's Endangered Species Act, or both. Sensitive species are those which are not provided with special legal protection, but are species for which the regulatory agencies are currently gathering information.

TABLE 1
LISTED AND CANDIDATE SPECIES WITH THE POTENTIAL TO OCCUR
WITHIN THE PROPOSED PROJECT SITE

SPECIES NAME	STATUS	HABITAT REQUIREMENTS
PLANTS		
Santa Ana River woolystar *(Eriastrum densifolium* ssp. *sanctorum)*	FE, SE	Coastal scrub and chaparral
San Fernando Valley spineflower *(Chorizanthe parryi* var. *fernandina)*	F & S Candidate	Coastal scrub
WILDLIFE		
Western yellow-billed cuckoo *(Coccyzus americanus occidentalis)*	SE	Riparian forests
Southwestern willow flycatcher *(Empidonax traillii)*	SE	Riparian forest and dense willow thickets
Coastal California gnatcatcher *(Polioptila californica californica)*	FT, CSC	Coastal sage scrub
Least Bell's vireo *(Vireo bellii pusillus)*	FE, SE	Riparian forest with structured undergrowth

KEY

FE	Listed as Endangered under the Federal Endangered Species Act
FT	Listed as Threatened under the Federal Endangered Species Act
SE	Listed as Endangered by the State of California
CSC	Department of Fish and Game Species of Special Concern
F & S Candidate	Candidate to be listed as Federally and State endangered

TABLE 2
SENSITIVE SPECIES WITH THE POTENTIAL TO OCCUR
WITHIN THE PROPOSED PROJECT SITE

SPECIES NAME	STATUS	HABITAT REQUIREMENTS
PLANTS		
Parry's spineflower *(Chorizanthe parryi* var. *parryi)*	FSC	Coastal scrub and chaparral
Coulter's saltbush *(Atriplex coulteri)*	CNPS 1B	Coastal bluff scrub and dunes
Many-stemmed dudleya *(Dudleya multicaulus)*	CNPS 1B	Coastal sage scrub and chaparral
Chaparral sand verbena *(Abronia villosa* var. *aurita)*	CNPS 1B	Coastal sage scrub and chaparral
Intermediate mariposa lily *(Calochortus weedii* var. *intermedius)*	CNPS 1B	Coastal scrub and chaparral
WILDLIFE		
Yellow-breasted chat *(Icteria virens)*	CSC	Riparian thickets and willows
Burrowing owl *(Athene cunicularia)*	FSC, CSC	Dry annual and perennial grasslands, deserts, agricultural land
Long-eared owl *(Asio otus)*	CSC	Riparian bottom-lands with tall willows and cotton woods
Golden eagle *(Aquila chrysaetos)*	CSC, FP	Rolling foothills, open grasslands, tall cliffs, and tall trees
Southwestern pond turtle *(Clemmys marmorata pallida)*	CSC, P	Permanent to semi-permanent bodies of water
Orange-throated whiptail *(Cnemidophorus hyperthyrus)*	CSC, FP	Coastal scrub, chaparral, sandy washes
San Diego horned lizard *(Phrynosoma coronatum blainvillei)*	CSC	Coastal scrub, chaparral in arid climate

KEY

CNPS 1B	California Native Plant Society: Rare, Threatened, or Endangered in California and elsewhere
FSC	Endangered Species Act Federal Species of Special Concern
CSC	California Department of Fish and Game Species of Special Concern
FP	California Department of Fish and Game Fully Protected
P	California Department of Fish and Game Protected

Field Surveys

Field surveys were conducted by Sapphos Environmental, Inc. (Ms. Marie Campbell, Ms. Melisa Helton, Ms. Susan Shanks, Ms. Michelle Dohrn, Ms. Jennifer Campbell, Mr. Blair Baker, and Mr. Peter Bloom) on April 9, 10, and 11, May 2, 23, and 25, and June 5, 12, and 13, 2001. During this period, all 2,460 acres of the CIM property were surveyed (Figure 3, *Survey Area).* Surveys were conducted during daylight hours, and weather conditions were good. For general surveys, teams walked linear transects spaced at 30- to 100-foot intervals in areas where suitable habitat was present

for those species listed in Table 1 and Table 2. Areas not walked in transects included alfalfa fields, fields that had been recently disced or mowed, and inaccessible areas of CIM. These areas were surveyed with binoculars while walking the perimeter of the area. Plants were identified in the field to the lowest possible taxonomic level, and wildlife species were identified in the field by sight or diagnostic sign.

Because burrowing owls had previously been identified as present on the CIM property, surveys for burrowing owl were performed according to the *Burrowing Owl Survey Protocol and Mitigation Guidelines* prepared by the California Burrowing Owl Consortium (CBOC) (Campbell 2001) (CBOC 1997). The protocol describes the surveys in three phases: Phase I, Habitat Assessment; Phase II Burrow Survey; and Phase III, Burrowing Owl Surveys, Census, and Mapping. Sapphos Environmental, Inc. conducted a Phase I assessment during previous surveys and determined that potential habitat was present in the project area. The Phase II Burrow Survey was then conducted by Sapphos Environmental, Inc. for the entire survey area (Figure 3, *Survey Area).* The survey team walked the area in transects approximately 10 meters apart to ensure 100% visual coverage of the area, and all burrows and owls were recorded and mapped for Phase III.

RESULTS

Existing Conditions/Land Use

The existing land uses of the CIM property primarily consist of institutional buildings. These buildings include the CIM Minimum Facility, Reception Center Central, Reception Center West, CIM East Facility, Prado Conservation Camp, and the Youth Training School (YTS). Ancillary uses of the property include: a wastewater treatment plant, water storage facilities, solid waste facilities, an inmate day labor yard, and a firing range. Recreational facilities are located on the northwest corner of the site which include the Reuben S. Ayala Community Park, the Golf Center, and the YMCA. Additionally, a single-family residential subdivision is located on the northeast corner of the property. Industrial uses include the Western Waste Wood Processing Plant, the Color Spot Nursery, and the Cogeneration Plant (Figure 4, *Land Use/Plant Community Map*).

Other than institutional buildings, agricultural use is the predominant use on the CIM property and includes a dairy, croplands and fields currently not in use. The dairy contains several pastures, calf barns, and milking facilities. Crops include alfalfa, corn, sudan and oats. In addition, many fields are fallow as part of crop rotation, and fields which are not in agricultural use are regularly disced and mowed for weed abatement. Fields which are not in use may contain many characteristic non-native grasses (Element Code 42200) including *Brassica nigra*, *Bromus mollis*, *Hemizonia* spp., *Lupinus* spp., and *Phacelia* spp. (Holland 1986). In addition, the Cypress Channel, which runs through the east-central section of the property from north to south, is a drainage channel with a concrete bottom and concrete sides. However, approximately 3,000 feet of the southern portion of the channel has a natural bottom with a water depth of 4 to 12 inches (at the time of surveys). This area supports disturbed riparian vegetation and emergent wetland vegetation such as scattered *Salix* spp., *Bacharis salicifolia*, *Malva neglecta*, and *Typhaceae* spp. (Figure 4, *Land Use/Plant Community Map*).

Plants

No Federally or State-listed, endangered, threatened, or sensitive plant species were observed during these surveys.

The dominant plant community on the project site is non-native grassland (Element Code 42200) which occurs on fallow agriculture fields. It includes the following plants: box elder *(Acer negundo),* amaranth *(Amaranthus blitoides),* oleander *(Narium oleander),* mulefat *(Bacharis salicifolia),* bull thistle *(Cirsium vulgare), Gnaphalium* sp., California sunflower *(Helianthus* sp.), telegraph weed *(Heterotheca grandiflora),* milk thistle *(Silybum marianum),* fiddleneck *(Amsinckia* sp.), black mustard *(Brassica nigra),* sweet alyssum *(Lobularia maritima),* wild radish *(Raphanus sativus),* London rocket *(Sisymbrium irio),* elderberry *(Sambucus mexicana),* Russian thistle *(Salsola tragus),* sweet clover *(Melilotus* sp.), storksbill *(Erodium* sp.), henbit *(Lamium amplexicaule),* horehound *(Marubium vulgare),* common mallow *(Malva neglecta),* cattail (*Typhaceae sp.*), eucalyptus *(Eucalyptus* sp.), California sycamore *(Platanus racimosa),* smart weed *(Polygonum* sp.), scarlet pimpernel *(Anagallis arvensis),* black willow *(Salix gooddingii),* arroyo willow *(Salix lasiolepis),* jimson weed *(Datura wrightii),* tree tobacco *(Nicotiana glauca),* stinging nettle *(Urtica urens),* red brome *(Bromus diandrus),* bermuda grass *(Cynodon dactylon),* and foxtail barley *(Hordeum jubatum)* (Attachment 1, *Field Notes).*

Wildlife

No Federally or State-listed endangered or threatened wildlife species were observed during the surveys.

No coastal sage scrub, wetland habitat, riparian forests, or coastal scrub chaparrals are present on the CIM property. Therefore, there is no potential for coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo to occur on the project site.

Three California Species of Special Concern were observed: burrowing owl, golden eagle, and Cooper's hawk.

Directed surveys confirmed the presence of 14 pairs of nesting burrowing owls within the study area including six pairs of burrowing owls within the 850-acre portion of the project site under consideration by the DGS (Figure 3, *Survey Area).* All pairs showed signs of nesting behavior. During April surveys, only one bird was typically observed near the burrow; the female was presumably incubating during this time. Later surveys revealed both birds sitting at the burrow entrance. When surveyors approached the burrows, one bird would fly into the burrow and the other bird would fly approximately 20 to 30 feet away and begin vocalizing with a series of chatters indicating nest defense. Mr. Peter Bloom, a recognized raptor expert, confirmed the nesting status of the birds. As of June 12, 2001, two pairs were observed with fledglings near the burrow entrances.

A golden eagle *(Aquila chrysaetos),* a California Species of Special Concern, was observed on April 2 and10, 2001, foraging in recently disced agricultural fields whose locations are identified on Figure 3, *Survey Area*. An active red-tailed hawk (*Buteo jamaicensis*) nest (two adults and three to four

juveniles) and one active Cooper's hawk (*Accipiter cooperii*) nest (two adults and three juveniles) were observed during the survey (Figure 3, *Survey Area*). Observations made on June 12, 2001 confirmed that three to four juvenile red-tailed hawks had fledged and left the nest. In addition, Sapphos Environmental, Inc. (Ms. Melisa Helton and Ms. Susan Shanks) concluded that three Cooper's hawk juveniles were approximately 30 days old on June 12, 2001. They are expected to leave the nest at approximately 30 to 34 days after hatching (Johnsgard 1990).

Other wildlife species observed during the surveys are those commonly associated with the disturbed and non-native plant communities present. Species that were observed and recorded in the field notes included: painted lady butterfly *(Vanessa cardui),* buckeye butterfly (*Junonia coenia*), cabbage butterfly *(Pieris rapae),* alfalfa sulfur butterfly *(Colias eurytheme),* eared grebe *(Podiceps nigricollis)*, double-crested cormorant *(Phalacrocorax auritus),* mallard *(Anas platyrhynchos),* northern shoveler *(Anas clypeata),* ruddy duck *(Oxyura jamaicensis),* American coot *(Fulica americana),* black-necked stilt *(Himantopus mexicanus),* American avocet *(Recurvirostra americana),* solitary sandpiper *(Tringa solitaria)*, killdeer *(Charadrius montanus),* black-shouldered kite *(Elanus caeruleus),* northern harrier *(Circus cyaneus),* turkey vulture *(Cathartes aura),* barn owl (juveniles) *(Tyto alba),* morning dove *(Zenaida macroura),* rock dove *(Columbia livia),* Anna's hummingbird *(Calypte anna),* western kingbird *(Tyrannus verticalis),* black phoebe *(Sayornis nigricans),* northern rough-winged swallow *(Stelgidopteryx serripennis),* violet-green swallow *(Tachycineta thalassina),* cliff swallow *(Hirundo pyrrhonota),* barn swallow *(Hirundo rustica),* American crow *(Corvus brachyrhynchos),* northern mockingbird *(Mimus polyglottos),* loggerhead shrike *(Lanius ludovicianus),* European starling *(Sturnus vulgaris),* common yellowthroat *(Geothlypis trichas),* western meadowlark *(Sturnella neglecta),* song sparrow *(Melospiza melodia),* Brewer's blackbird *(Euphagus cyanocephalus)*, red-winged blackbird (*Agelaius phoeniceus*), house finch *(Carpodacus mexicanus),* long-tailed weasel *(Mustela frenata),* coyote *(Canis latrans),* California ground squirrel *(Spermophilus beecheyi)*, and cottontail rabbit (*Sylvilagus auduboni*) (Attachment 1, *Field Notes).*

SPECIES CONSIDERED

Burrowing Owl

Burrowing owls are small to medium-sized raptors that are characterized by their use of burrows for nesting. Adults range from 19 to 25 centimeters in length, and weigh approximately 150 grams. They have relatively long legs, a distinct yellow iris, brown plumage with buffy white spots on the back, and a white underside with brown barring (Haug, et al. 1993).

Burrowing owls are found from southern Canada to southern South America (Johnsgard, 1988). They are resident largely throughout the southern United States, with several populations inhabiting the gulf coast of Louisiana and the Florida panhandle (Johnsgard, 1988). In Southern California, burrowing owls are common in the Imperial Valley, rather common in agricultural areas within the Colorado River district, and generally scarce and decreasing elsewhere (Garrett and Dunn, 1981). Along coastal Southern California, the burrowing owl distribution is greatly reduced and localized. They occur primarily in agricultural and grassland areas of interior and coastal valleys, and in fewer numbers on bluffs along the immediate coast, but are resident on the Channel Islands (Garrett and Dunn, 1981). Burrowing owls from more northerly areas occasionally migrate into southern and

coastal regions of Southern California during the winter (Garrett and Dunn, 1981). Preliminary data from the Los Angeles County Breeding Bird Atlas (Los Angeles Audubon Society, unpublished) indicates records of several breeding pairs of burrowing owl in the Antelope Valley, but no breeding has been documented on the coastal slope of Los Angeles County for records between 1995 and 1997 (Weimer, personal communication).

Burrowing owls prefer dry, open, treeless shortgrass plains, often in areas with little or no vegetation, which are often associated with burrowing mammals and rodents. Burrowing owls can also be found on golf courses, at airports, in cemeteries, in vacant lots in residential areas, and along shoulders of roadways. Typically, they occupy abandoned squirrel or rodent burrows and enlarge them by kicking backward with their feet and digging with their bills (Small 1994). They also often line their burrow entrances with dried cow or horse manure, which is believed to mask their scent (Haug et al., 1993). Breeding usually begins during March or April in California, and during this time, burrowing owls can be observed near their burrows foraging and roosting. When approaching a burrow during the breeding season, the owls are known to fly from their ground perch and vocalize, thus making detection relatively easy.

CONCLUSIONS

The project will not result in any impacts to Federally or State-listed endangered, threatened plant or wildlife species. However, the project has the potential to impact one California Species of Special Concern within the project site. Of the 14 pairs of burrowing owls, only 6 pairs were observed within the project site. If resident or nesting burrowing owls are still present within the impact area prior to the initiation of construction, mitigation measures should be developed in order to reduce the impacts to less than significant.

Three California Species of Special Concern were observed on the CIM property: burrowing owl, golden eagle, and Cooper's hawk. However, they were not observed within the impact area of the project site. A golden eagle was observed in flight over the CIM property; however, it was observed foraging on the ground approximately one mile southwest of the impact area. Therefore, it is anticipated that the project will not impact the golden eagle. In addition, the red-tailed hawk nest and the Cooper's hawk nest are located outside of the site specific plan out of the impact area. Therefore, it is anticipated that the project will not impact the red-tailed hawks or the Cooper's hawks.

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Plant Compendium

Family	Scientific Name	Common Name
Amaranthaceae	Amaranthus blitoides	prostrate pigweed
Amaranthaceae	Amaranthus palmeri	Palmer's amaranth
Amaranthaceae	Amaranthus powellii	Powell's amaranth
Asteraceae	Gnaphalium sp.	cudweed
Asteraceae	Gnaphalium canescens spp. beneolens	cudweed
Boraginaceae	Heliotropium curassavicum	heliotrope
Brassicaceae	Brassica nigra	black mustard
Chenopodiaceae	Chenopodium berlandieri	netseed, lambs quarters
Chenopodiaceae	Salsola tragus	Russian thistle
Convolvulaceae	Convolvulus arvensis	bindweed
Fabaceae	Medicago sativa	alfalfa
Hydrophyllaceae	Phacelia sp.*	phacelia
Myrtaceae	Eucalyptus sp.	gum tree
Poaceae	Alopecurus saccatus	foxtail
Poaceae	Cynodon dactylon	bermuda grass
Poaceae	Echinochloa oryzoides	barnyard grass
Poaceae	Setaria pumila	yellow foxtail
Polygonaceae	Polygonum sp.	smartweed

*Perennial

San Fernando Valley spineflower

Distribution

San Fernando Valley spineflower (Chorizanthe parryi var. fernandina) is listed as endangered by the state of California, and is a federal candidate. Additionally, the San Fernando Valley spineflower (SFVS) hold a 1B listing with the California Native Plant Society. SFVS is endemic to southern California, and formerly occurred from Lake Elizabeth in Los Angeles County south to Santa Ana in Orange County. The type specimen of SFVS is from San Fernando Canyon, "near the San Fernando railroad station," Los Angeles County, California (Brown 1884; Goodman 1934). Apparently, this taxon has always been considered rare or localized in distribution (Abrams 1904; Davidson and Moxley 1923). A query of the CNDDB returned one occurrence of SFVS in the Calabasas quadrangle (Ventura County), in which the *Specific Plan Area* occurs, and a total of eight extant occurrences. However, six of these were recorded between 1890 and 1940, and have not since been confirmed. The only confirmed occurrences are the one in the *Specific Plan Area* and a second occurrence in the Val Verde quadrangle (Los Angeles County) at Newhall Ranch.

Description

San Fernando Valley spineflowers (SFVS) are annual herbs of the buckwheat family (Polygonaceae). SFVS may be found prostrate, lying on the ground, or decumbent, reclining on the ground with the tip ascending. The stem length ranges from 2 to 30 cm, with several from the base that repeatedly fork. The leaf blade ranges from 5 to 40 mm. It blooms from April to June with white flowers that are sparsely hairy. The inflorescence is openly distributed in small clusters with ringlike arrangements of leaflike structure at the base of the flowers. The leaflike structures have narrow bristlelike appendages.

Habitat

Historic habitat for San Fernando Valley spineflower (SFVS) includes gravelly or sandy soils, often in washes. Currently, it is generally found in association with openings in coastal sage scrub habitat and grasslands, scrubland/grassland ecotone and disturbed areas with exposed soils. The preferred elevation is 200 to 350 m. SFVS is associated with the following soils: Zamora loam, San Andreas sandy loam, and Santa Lucia shaly silty clay loam.

Reproduction

The bloom period for San Fernando Valley spineflower is April to June. There are nine stamens occurring on this species.

Santa Ana River Woollystar

Distribution

Santa Ana River Woollystar (Eriastrum densifolium spp. sanctorum) is both federally and state listed as endangered, and holds a 1B listing with the California Native Plant Society. Santa Ana River

Woollystar is endemic to California, occurring Orange, Riverside and San Bernardino Counties. It is distributed along the Santa Ana River and southwest San Bernardino County. This species is threatened by habitat alteration, including development, vehicles, sand and gravel mining, and non-native plants.

Description

Santa Ana River Woollystars are perennial herbs of the phlox family (Polemoniaceae), densely covered with woolly hairs. The plant ranges in height from 25 to 75 cm, with leaves of length 10 to 50 mm. The leaves generally have 2-6 lobes, the rounded segments of the leaf. This species has a woody base from which much branching occurs. Santa Ana River Woollystar blooms with blue flowers. The petals on the flowers unite together to form a funnel-shaped tube. Inflorescence of Santa Ana River Wollystar are heads, a dense cluster of flowers that are directly attached, with a reduced leaflike structure at the base.

Habitat

Santa Ana River Wollystars are found in coastal sage scrub and chaparral communities as well as alluvial fan habitats. This species typically occurs in sandy or gravelly soil, especially along the Santa Ana River, at elevations ranging from 150 to 610 m.

Reproduction

This species blooms from June to September. There are stamens that are inserted just below the clefts of the leaf-lobes. The pollen-bearing portion of the stamen has cavities of seeds that are in the form of a network.

Intermediate Mariposa Lily

Distribution

Intermediate Mariposa Lily (Calochortus weedii var. intermedius) is endemic to California, occurring in Orange, Riverside, and Los Angeles counties. The California Native Plant Society lists the Intermediate Mariposa Lily as fairly endangered in California, distributed in a limited number of occurrences. This species is distributed along the central South Coast and northern Peninsular Ranges of Orange County. It is threatened by development, road construction, and fuel modification.

Description

Intermediate Mariposa Lily is a bulbiferous perennial herb of the lily family (Liliaceae). It has a slender stem, generally branched, that ranges from 30 to 90 cm high. The basal leaves are 20 to 40 cm long and 10 to 15 mm wide, withering before anthesis. This species has a fibrous bulb coat and blooms with purplish flowers that are fringed with dark or yellow hairs. The flowers are open-shaped with petals that are broadly wedge-shaped and rounded. Inflorescence of Intermediate Mariposa Lily is often umbel-like with 2 to 6 erect flowers.

Habitat

Intermediate Mariposa Lilies are found in coastal sage scrub and chaparral communities, as well as valley and foothill grasslands. This species occurs in dry, rocky, open slopes at elevations ranging from 180 to 855 m.

Reproduction

This species blooms from May to July. The anthers on this species are rounded. The seeds are generally flat and netted, appearing in two rows per chamber with many seeds per row.

Chaparral Sand-Verbena

Distribution

Chaparral Sand-Verbena (Abronia villosa var. aurita) is endemic to California, occurring in Orange, Riverside, and San Diego counties. The California Native Plant Society lists Chaparral Sand-Verbena as seriously endangered in California, distributed in a limited number of occurrences. It is distributed in the central and southern South Coast, the western Sonoran Desert, and from the head of Coachella Valley to interior Orange, Riverside, San Diego counties.

Description

Chaparral Sand-Verbena is a glandular-hairy annual herb of the four o'clock family (Nyctaginaceae), known to hybridize with Abronia gracilis. The stem of this species may be found prostrate to ascending at a height below 80 cm. The leaf stalk is 0.5 to 5 cm in length. The leaf blade ranges from 1 to 5 cm long and 1 to 4.5 cm wide, while the leaf shape may be triangular-ovate to round. This species blooms with 15 to 35 flowers that are pale to bright magenta in color. The fruit produced by this plant has a spindle shape that is broadest near the middle and tapers toward both ends. The body of the friut is nearly smooth with almost no transverse veins. The inflorescence of the Chaparral Sand-Verbena may be a head or umbel with a stalk 2 to 10 cm in length and leaflike structures at the base that range from 3 to 11 mm.

Habitat

This species dwells in sandy places, particularly in coastal sage scrub and chaparral communities. It is found at elevations from 80 to 1600 m.

Reproduction

Chaparral Sand-Verbena blooms from January to August. The seeds are narrow-oblong and 2.5mm in size.

Coulter's Saltbush

Distribution

Coulter's Salt Bush (Atriplex coulteri) is distributed from Santa Barbara County to Baja California, particularly along the South Coast and the Channel Islands. It is fairly endangered in California and is rare outside of California, according to the California Native Plant Society. This species is threatened by development, and probably by feral herbivores.

Description

Coulter's Saltbush is a monoecious perennial herb of the goosefoot family (Chenopodiaceae). It has several stems that form from a slightly woody base. The stems range in length from 30 to 100 cm, and may be found decumbent, reclining on the ground with tip ascending, to erect. The leaf blade appears gray and scaly with a length ranging from 7 to 20 mm. The leaf shape is narrowly elliptic to ovate. Coulter's Saltbush has pistillate inflorescence of clusters to spike- or panicle-like form in which the flowers mature from the bottom upwards. This species has fruiting leaflike structures at the base of the inflorescence that are 2 to 3 mm long. These structures occur two per fruit. The pistillate inflorescence is fused to middle, obvate, and smooth or few-tubercled.

Habitat

This species is found in coastal strand, coastal sage scrub and valley grassland communities. It is generally found in alkaline or clay soils, often in open sites. The elevation at which this species is found ranges from 3 to 460 m.

Reproduction

Coulter's Saltbush blooms from March to October. There are dense clusters of staminate in the upper axils and short terminal spikes with pistillate below. The seeds are brown and range from 1.3 to 1.5 mm in size.

Payson's Jewel-Flower

Distribution

Payson's Jewel-Flower (Caulanthus simulans) is endemic to California, occurring from Riverside County to interior San Diego County. The California Native Plant Society lists Payson's Jewel-Flower as rare in California, but found in sufficient numbers and distributed widely enough that the potential for extinction is low. This species is distributed along the eastern South Coast of Riverside County, the eastern Peninsular Ranges, and the western edge of the Sonoran Desert.

Description

Payson's Jewel-Flower is an annual herb of the mustard family (Brassicaceae), often confused with Caulanthus heterophyllus var. pseudosimulans which is more coastal and, unlike Caulanthus simulans, appears after fires. Payson's Jewel-Flower is covered with coarse, stiff hairs near the base. The stem is generally branched above. This species has basal leaves that are 2 to 6 cm long and sparingly covered with coarse, stiff hairs. These leaves are coarsely toothed to shallowly cut along the margin. Payson's Jewel-Flower has siliques, dry, dehiscent fruit, that are straight and slender with a length of 4 to 6 cm. This species blooms with cream-yellow flowers that have petals 5 to 10 mm

long. Inflorescence is generally unbranched and elongate with pedicellate flowers maturing from the bottom upwards.

Habitat

The habitat for Payson's Jewel-Flower includes sandy or granitic soils often in open, dry areas. It is found in chaparral and coastal sage scrub communities. The preferred elevation is 90 to 2200 m.

Reproduction

The bloom period for this species is from March to June. It has oblong seeds, not winged, and approximately 1 mm long.

Robinson's Pepper-grass

Distribution

Robinson's Pepper-grass (Lepidium virginicum var. robinsonii) is distributed throughout Southwestern California and into Baja California. It is found in Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. The California Native Plant Society lists Robinson's Pepper-grass as distributed in California in one to several highly restricted occurrences or present in such small numbers that it is seldomly reported. It is fairly endangered in California and rare outside of California.

Description

Robinson's Pepper-grass is an annual herb of the mustart family (Brassicaceae). The stem ranges from 10 to 20 cm tall with dense, pointed hairs. The leaves arise from the stem and are divided or lobed in narrow segments. The leaves are 1 to 2 mm wide. This species produces smooth, round, and hairless fruit that is 2.5 to 4 mm in size. The flowers are white with petals that are 1 to 2 mm and inversely ovate. Inflorescence of Robinson's Pepper-grass is generally unbranched and elongate with pedicellate flowers maturing from the bottom upwards. The stalk of a flower is flat, and generally winged and hairy.

Habitat

This species dwells in chaparral and coastal sage scrub communities. It is found in dry soils and shrubland at elevations ranging from 1 to 500 m.

Reproduction

Robinson's Pepper-grass blooms from January to July. The embryonic root is generally at the back of one cotyledon, a seed leaf.

Photo 1: Typical plant community consists of recently disced or abandoned agricultural fields.

Photo 2: Burrowing owls will often take advantage of mounds that were created from previous construction activities.

Photo 3: Area immediately south of YMCA and east of the driving range. One active burrow is located on this parcel (soon to be park expansion).

Photo 4: A "close-up " of photo 3 shows the active burrowing owl burrowing. Note the presence of manure around the entrance.

Photo 5: Dirt mound containing an active burrow. This area is just south of Edison Avenue and north of the high tank reservoir near Magnolia Avenue.

Photo 6: "Close-up " of photo 5 shows burrow entrance. A nesting pair was present and burrow contained eggs.

Photo 7: Burrowing owl sitting near a satellite burrow; note the recently disced field in the background. This area is located on the Cypress Channel south of Edison Ave., between Euclid and Magnolia Ave.

Photo 8: This active burrow belonged to the burrowing owl in photo 7. The nest burrow is across the channel from the satelite burrow.

Survey Form

File: 43

Date: 4/10/01

Sapphos Environmental, Inc.

Job No. 1218-001

Personnel/Notetaker: [illegible] B. Baker, M. Helton

Job Title: Chino Correctional [illegible]

Weather: Temp. 58°F Precip — Cloud cover 40% Wind speed 0-2 mph

Survey Type: Burrowing Owl, Cactus Wren, CAGN, Special-status reptiles, habitat assessment [illegible]

USGS Quad Name: Prado Dam

Township: 2S

Range: 8W 7W

Section:

General Habitat/Observations/Misc. Notes: (Plant Community, Soil/Substrate, Nearby Land Use, Significant Landmarks)

Met Gilbert on arrival and showed him the preconstruction site clearance around 9:30am. Left main entrance and started survey. Looked at potential nesting sites adjacent to the flooded area and observed yesterday. Checked all potential suitable habitats for burrowing owl within + adjacent to study area. No suitable habitat for sensitive reptiles, coastal California gnatcatcher (no coastal sage scrub), no habitat for cactus wren. Checked for peregrine falcon on tall structures, buildings in site.

H:\surveyform2.wpd

Time	Species	Sign	Microhabitat	Comments
	Painted lady	O	NNG	Vanessa cardui ?
	Cabbage white	O	NNG	
	Anise swallowtail	O	NNG	common
	Buckeye	O	NNG	
	Stinkbug	O	NNG	
	Ladybugs	O	NNG	
	Loggerhead Shrike	O	NNG	
	American Crow	O		

Survey Form

File: 43

Date: 4/9/01

Sapphos Environmental, Inc.

Job No. 1218-001

Personnel/Notetaker: [illegible], M. Kelton, S. Shanks

Job Title: Chino Correctional Site

Weather: Temp 45 58 Precip light Cloud cover 70% Wind speed <3 mph elevation 600- 675 feet

Survey Type: Burrowing Owl, [illegible] [illegible] - CAGN [illegible] [illegible]

USGS Quad Name: Prado Dam

Township: T2S

Range: R8W [illegible]

Section:

General Habitat/Observations/Misc Notes: (Plant Community, Soil/Substrate, Nearby Land Use, Significant Landmarks)

Meet with our Sarah Gilbert [illegible] at Gate. Plant Community is ruderal & weed vegetation non-native grasslands with paved & dirt road [illegible] some [illegible] facilities, cow milking facility, greenhouse. Discing present & chemical use. Some areas with bare ground & sparse vegetation. Burrowing Owl adult with territorial behavior. Activity at nest site. Also two possible site near [illegible] & parking, next to burrow. Food materials consisted bones, [illegible] by [illegible] insect parts, grasses. Entrance 5" min diameter with scat, [illegible]. Some many [illegible] mammal burrows. All 3 burrowing Owl nest site contain dried cow manure, some feathers. Two site only have one adult present. [illegible] contain a pair. Predators present: hawks, dogs, crows, raptors. All burrows located in bare ground w/ some grasses around.

H:\surveyform2.wpd

Time	Species	Sign	Microhabitat	Comments
9:30am	Burrowing Owl	OSVN	non-native grassland	one adult calling
	Red-tailed hawk	O	NNG	[illegible]
	Say's Phoebe	OV	NNG	
	painted lady	O	NNG	abundant
	cabbage white	O	NNG	
	Loggerhead shrike	O	NNG	[illegible]
	Western meadowlark	OV	NNG	
	Western kingbird	OV	NNG	

5/2/01
Pg 1 of 2

Chino Institute for Men prison
- Survey for BUOW & spineflower

MNIt & JCI present
61°
100% CC

BUOW & burrow on east side of canal & N of east facility. Burrow is on edge of disced field & canal.

RTHA nest w/ 1 bird incubating on power tower just W of Magnolia & E of the abandoned bldgs NE of sewage plant. Tower #45/3.

The banks of the firing range have potential for BUOW but could not survey b/c they were firing.

GIDEA w/ kill in a recently disced field. Field is W of canal, S of east facility & just E of RTHA nest.

Survey Form

File: 43

Date: 4/11/01

Sapphos Environmental, Inc.

Job No. 128-001

Personnel/Notetaker: K. Peters, S. Stewart, A. Helton

Job Title: Chino Channel Site

Weather: Temp 63°F Precip none Cloud cover 80% Wind speed 1-3 mph

Survey Type: burrowing owl / plants

USGS Quad Name: Prado Dam

Township: T2S

Range: R8W, R7W

Section:

General Habitat/Observations/Misc. Notes: (Plant Community, Soil/Substrate, Nearby Land Use, Significant Landmarks)

Meet Gilbert Chavez on exterior back entrance around 9:30am got clearance check. Then visited burrowing site adjacent to YMCA. Then walk concrete cypress channel to look for burrowing owls and check all small structures within study area for presence. Then took photos of burrowing owls & nest site.

(A) Quadrilateral burrow and south facing entrance. Entrance of burrow ~45% slope. Then at around ~15% slope. Diameter of entrance 11.5cm x 7.6cm. Most found materials; raw manure, dirt, divots, seed, fecal materials; ladybugs, insect parts, exoskeleton, grasshopper, bones, grasses. Dominated by insect/grasshopper diet. (E) Bird B.O. site concrete 5'/2 high by 20' long. Spoken/being used by multiple species. Approx 100' south of So. Edison Rd. In facility grounds, man made wood.

H:\surveyform2.wpd

Time	Species	Sign	Microhabitat	Comments
	Allen's hummingbird	O	LIWG	
	brush rabbit / cottontail rabbit	O		
	cliff swallow	O		
	violet green swallow	O		
	red-tailed hawk	O		
	Northern Harrier	O	LIWG	near cypress channel

DATE:

DATE:

(3)

* observed Coopers hawk young (1)
Still in nest, & was flying
& vocalizing near nest.

In dairy area - center row
~20ft wide,
1 nest burrow (2 birds) along
fenceline. Both birds
flew from burrow when
we approached.

burrow entrance contained
several pellets, feathers

DATE:

(1)

DATE:

(2)

(909) 523 2220 PB

Sapphos Environmental

Bio Survey 1218.001
MNH, SLS
Parcel S. of Prado Camp 6/5/01

brewers blackbirds

- field has been disced recently
soft soil
ragweed + mustard abundant

squirrel burrows

white sulfers
A. Crow
CA ground squirrel
morning dove
raddish
mocking bird

many squirrel remains under
poteo + oak tree

E. Starling

Amaranthus (pigweed?)

Oaks street?
walked fenceline

squirrel burrow

red tailed hawk
eastern meadow

2nd burrow from feeding trough

JCY, JAW
6/22/01
1218-001

Burrowing Owl Survey

Survey berm areas at shooting range. They were recently burned (Monday June 18, 2001) for grass control. Unburned areas were weed whacked. CIM staff also disclosed that the shooting range is only closed down four days per year. Four burrows look like possibilities, but lacked evidence to be sure - such as feathers, owl pellets, droppings observed numerous ground squirrels and lizards.

Survey Form

13

File: 4.3

Date: 6-[redacted]-01

Chino - Burrowing Owl Survey

Sapphos Environmental, Inc.

Job No. 1218-001

Notetaker: MNH

Personnel: MNH, SLS, JCY, BEB, PTS, JLK

Job Title: WB

Weather: Temp.(Begin)____(End)____Precip.____Cloud cover____Wind speed____Elevation____

Time:____to____

Survey Type: BUOW + Sensitive PFW

USGS Quad Name: Prado Dam
Township:
Range:
Section:

General Habitat/Observations/Misc. Notes: (Plant Community, Soil/Substrate, Nearby Land Use, Significant Landmarks)

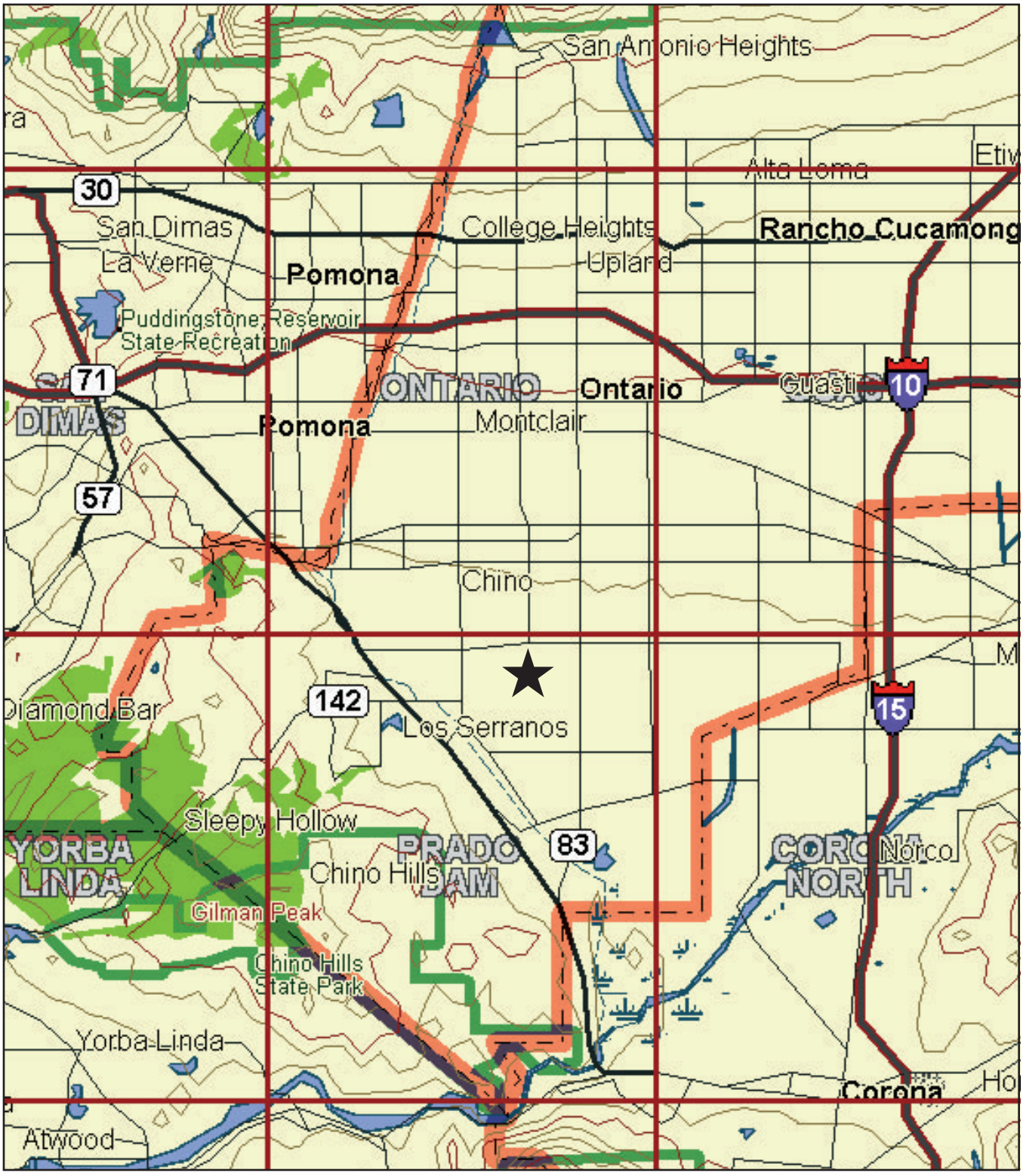
~9:00 looked at Barn owl nest in haystacks found on a previous day. Two juveniles

marked ① on aerial. Then found a new burrow of burrowing owls along east corral at dairy. Saw 2 adults and potentially 3 juveniles. All were sitting around burrow when approached. Several went down in the burrow and some flew off.

9:35 Found a burrow along channel, marked ② on aerial just south of bridge on Eucalyptus and north of East facility. Two adults sitting next to burrow. Burrow on east side of channel.

9:45 long tailed weasel on west side of channel. Went into a burrow in the road. Marked W on aerial

H:\survey\form2.wpd



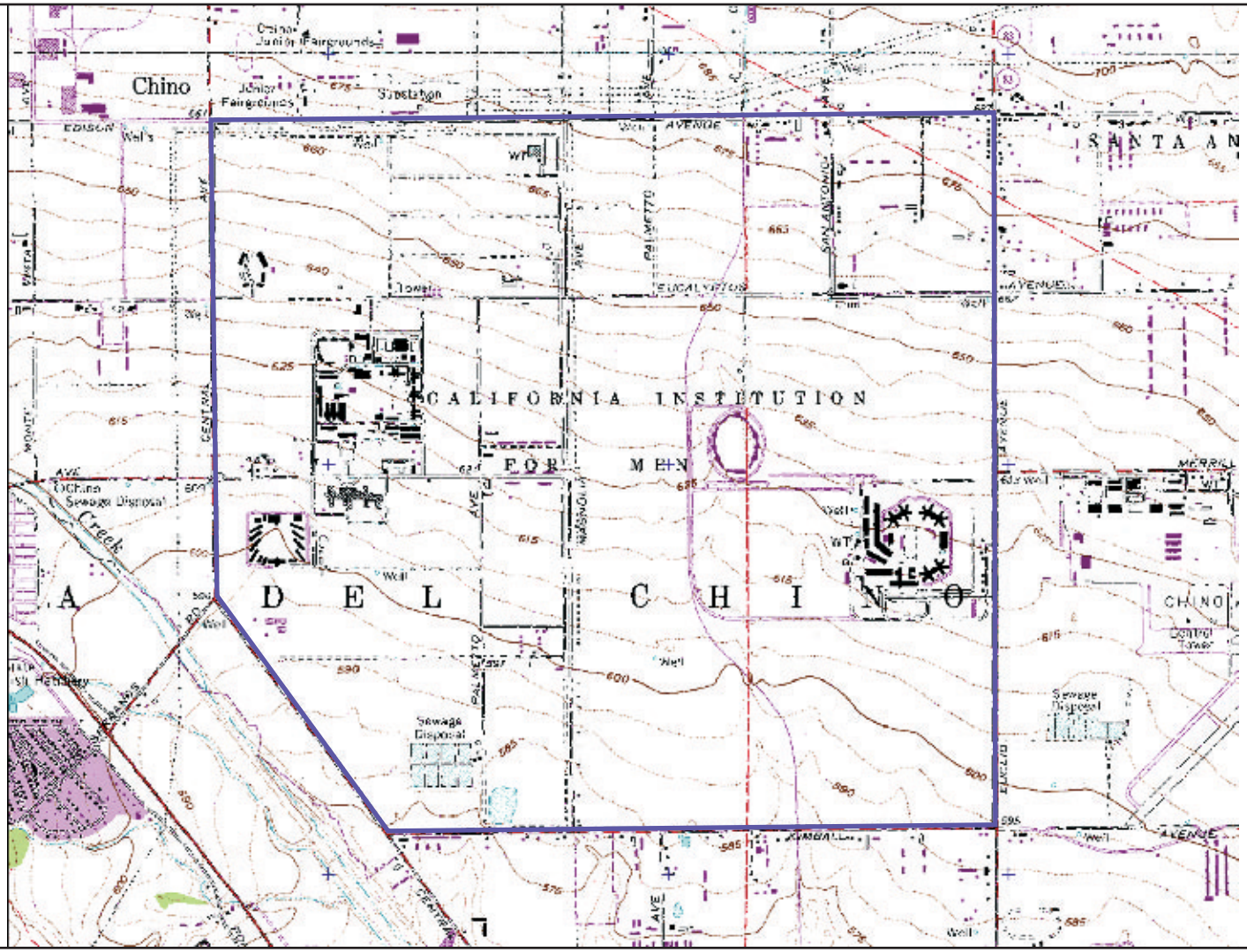
LEGEND

★ **Project Location**

N

Not to Scale

FIGURE 1
Regional Vicinity



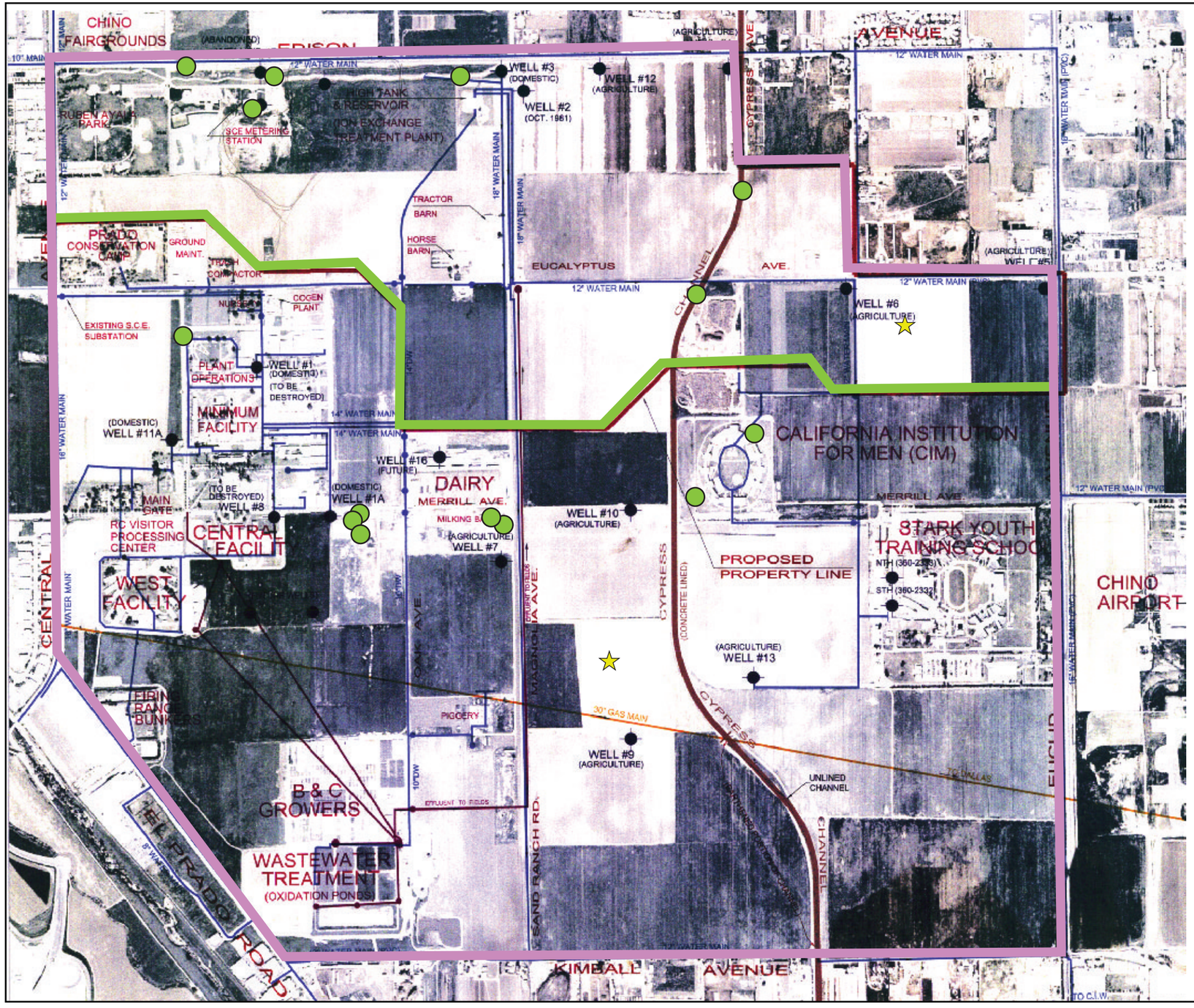
LEGEND

Project Boundary

N

Not to Scale

FIGURE 2
Topographic Map



LEGEND

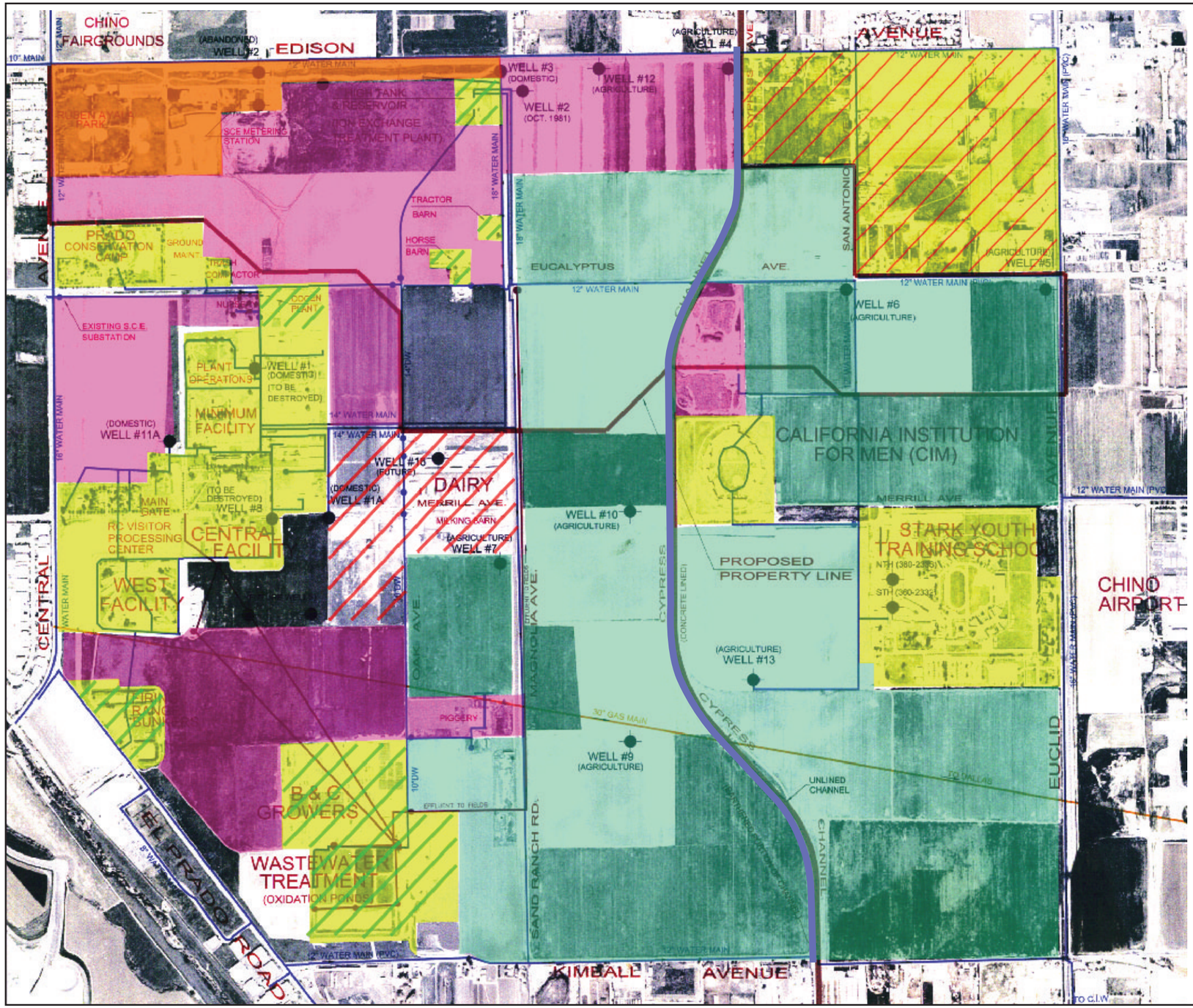
- Southern Property Line of Proposed Project
- Survey Area
- Active Burrowing Owl Burrow
- Golden Eagle Sighting
- Water Main
- Water Recycled
- Gas Main
- Cypress Channel

N

Not to Scale

Source: Associated Engineers

FIGURE 3
Survey Area



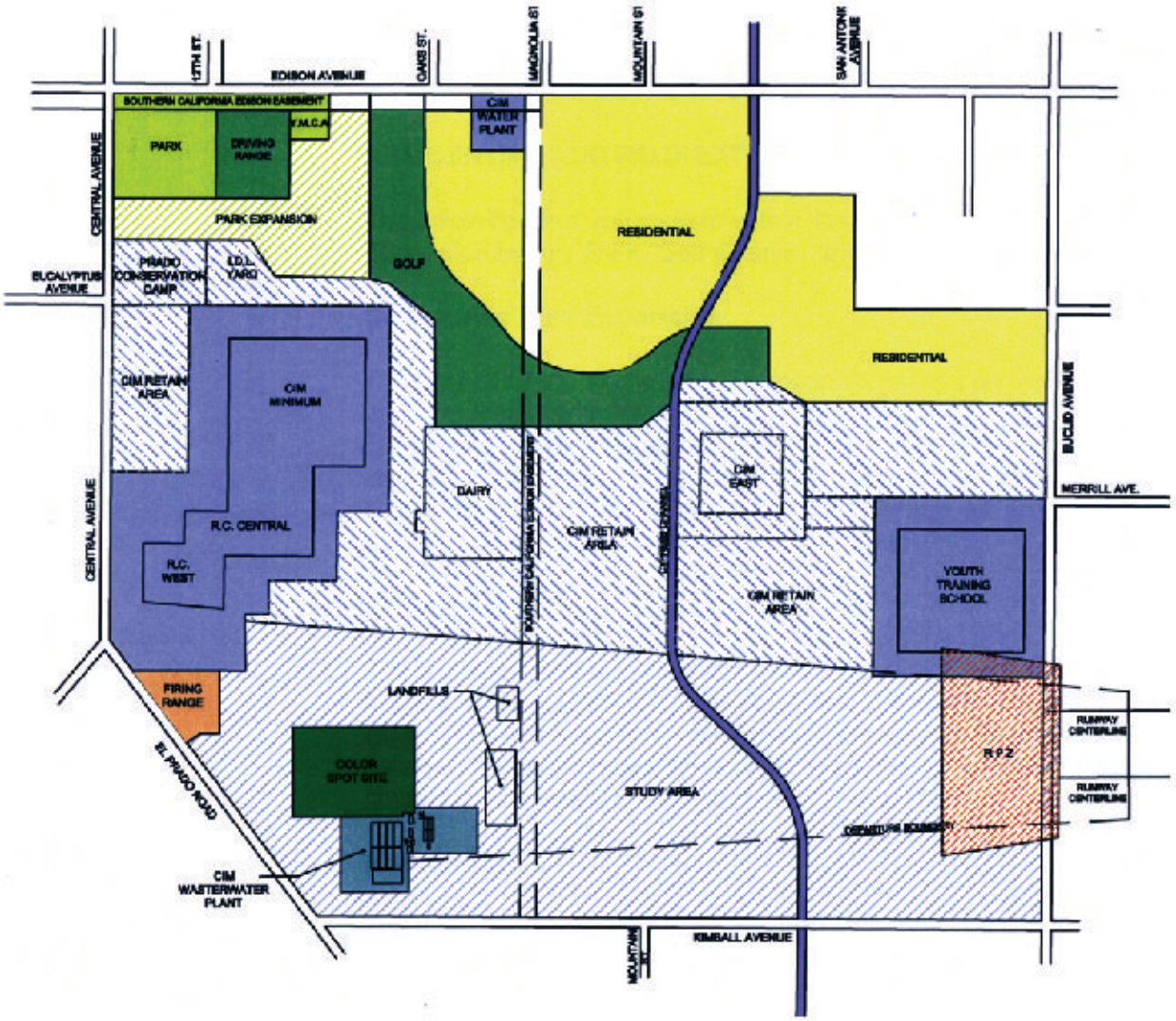
LEGEND

- Residential Use
- Institutional Buildings and Landscaping
- Fallow Fields/Non-native Grassland
- Dairy/Pastures
- Cypress Channel
- Ancillary and Industrial Buildings
- Recreational Facilities
- Agriculture Fields

N

Not to Scale

FIGURE 4
Land Use/Plant Community Map



Source: Strategic Mater Land Use Plan CIM Chino

FIGURE 5
Department of General Services
Master Land Use Plan